

How do Payment Gateways Work?

In 2022, it is estimated that more than 80% of U.S. purchases will be accomplished using a method other than cash. Additionally, from 2020 through 2025, online payment transaction values are likely to grow more than 15%.

In an increasingly cashless world, where payment services are primarily performed digitally or through credit cards, a payment gateway can simplify and expedite payments to help both consumers and businesses.

Payment gateways are a merchant service that processes credit card payments for both ecommerce sites and traditional brick-and-mortar stores. They can be thought of as the metaphorical cash register in an electronic transaction.

However, like any cash register, it needs to be secure and convenient. Before selecting a payment gateway, it is critical to understand how they work, what to look for and what options are available.

How Do Payment Gateways Work?

A payment gateway acts as the central cog in the payment processing system, whether you are making a purchase online or in-store.

Within a transaction, it is the front-end mechanism that collects, transfers, and authorizes customer information in real-time to a merchant's bank, where the transaction itself is then processed.

Main Types of Payment Gateways

There are generally three types of payment gateways:

On-site payments.

Large-scale businesses tend to use on-site payments handled on their own servers where the checkout experience and payment processing all work through your system.

Now the advantages are flipped — you'll have more control and responsibility.

If you handle payments on-site, every variable counts and any improvement to the shopping experience can create dramatic changes in your bottom line — especially true for any retailer with a high sales volume.

Checkout on site, payment off-site.

Through this method, the front-end checkout will occur on your site, but the payment processing happens through the gateway's back end.

Like redirected payment gateways, this method can simplify the payment processes while ensuring increased security on the back-end.

However, the downside is that you won't be able to control the user's entire experience through the payment gateways. If you decide to go this route, ensure that you are confident in the security of the payment gateway.

Redirects.

Redirects often include options for alternative payment methods, such as a company allowing the use of PayPal. When the gateway takes a customer to a PayPal payment page to handle the complete transaction, it becomes a Redirect.

A small business can use a Redirect gateway to incorporate the convenience and security of a larger platform. Redirects have the advantage of simplicity for the retailer, though they also mean less control for the merchant — and a second step for customers.

Payment Gateways Limitations

All payment gateways are not created equal. When choosing a payment gateway, you'll have to understand and accept some limitations — many of which are inherent to the payment gateway infrastructure.

In more detail, consider the following:

Gateways rarely accept all types of cards/payments.

Although many payment gateway providers like to advertise the universality of their gateways, they typically won't highlight when they can't accept payments from specific card issuers and processing portals.

Before selecting a payment gateway, ensure you understand what your customers need to use, where the limitations lie and what's excluded.

International shoppers may not have a payment option.

Merchants looking to capture a broad international audience need to ensure their payment gateway can work with different online stores and payment platforms. For example, in China, Alipay is much more popular than payment options that might be familiar to customers in the US.

International shoppers may also run into higher prices. Although many payment gateway providers charge fixed transaction fees for domestic and international commerce, some charge more for cross-border transactions.

Consider tools like Webinterpret that can plug into your ecommerce platform and provide a fully localized international checkout process enabling you to accept payment in 25 currencies.

Security flaws.

In an increasingly digital world, security must be of the utmost concern. According to a recent report, around two-thirds of consumers would stop shopping with a retailer previously hit by a security breach.

Although a high-quality payment gateway should be secure, there are some security vulnerabilities you'll have to keep in mind:

Data breaches: TLS encryption helps most payment gateways handle confidential processing data like card information, but once the data is on a server, that server remains a risk.

Mobile payment issues: You might control much of the security at the transaction, but you still don't control who has access to your customer's mobile device.

Malware: Malware that reads passwords and infiltrates user accounts can send apparently-authentic transactions through secure [PaymentGateway Inc](#), even while the transaction itself is a fraud.